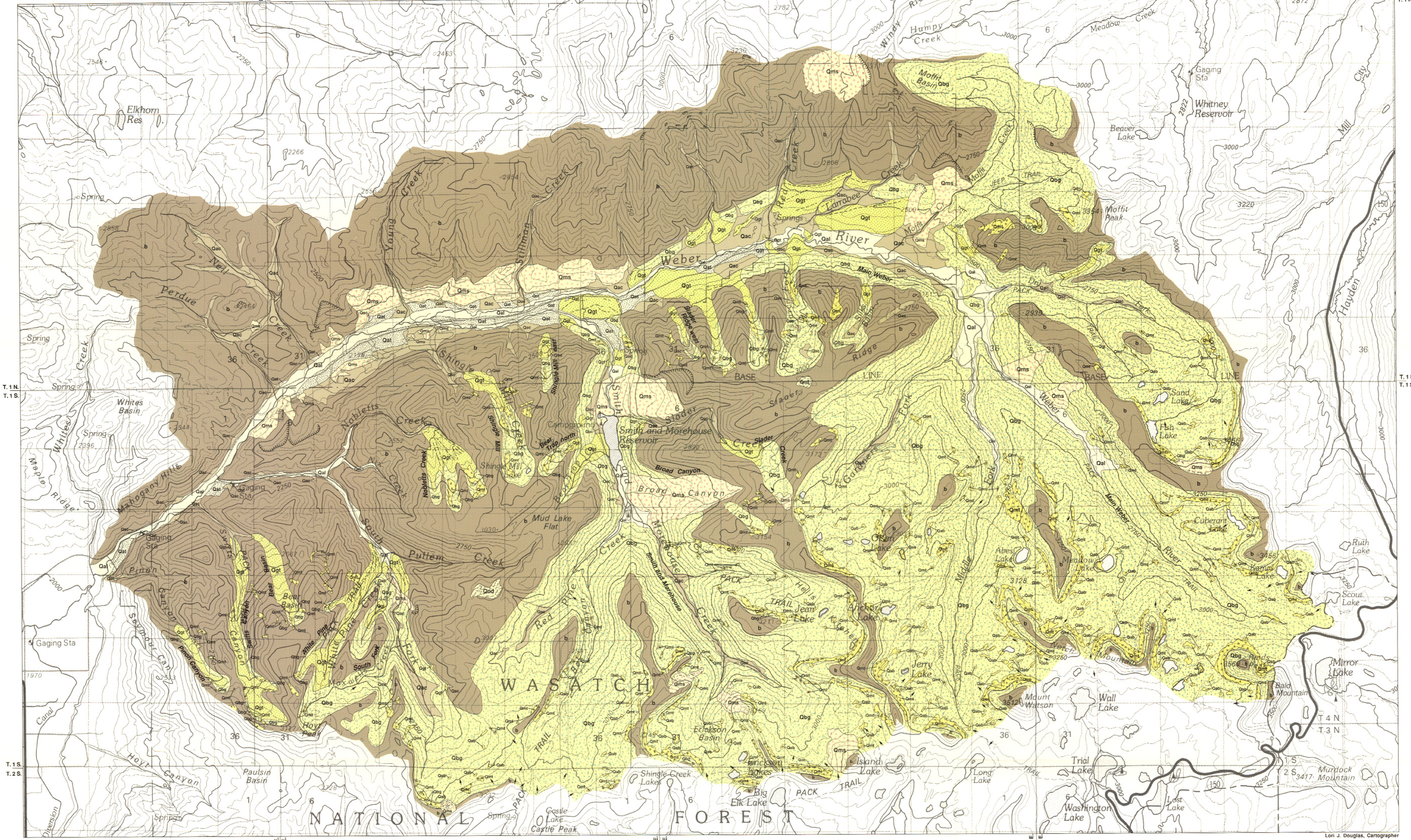
COGEOMAP — *Cooperative Project between*
UTAH GEOLOGICAL SURVEY
Utah Department of Natural Resources, *and*
THE UNITED STATES GEOLOGICAL SURVEY



Base map from U. S. Geological Survey
Salt Lake City and Kings Peak 30 x 60
minute series, 1980, 1982

Lori J. Douglas, Cartographer

QUATERNARY GEOLOGIC MAP OF THE UPPER WEBER RIVER DRAINAGE BASIN, SUMMIT COUNTY, UTAH

by

Charles G. Oviatt

1994

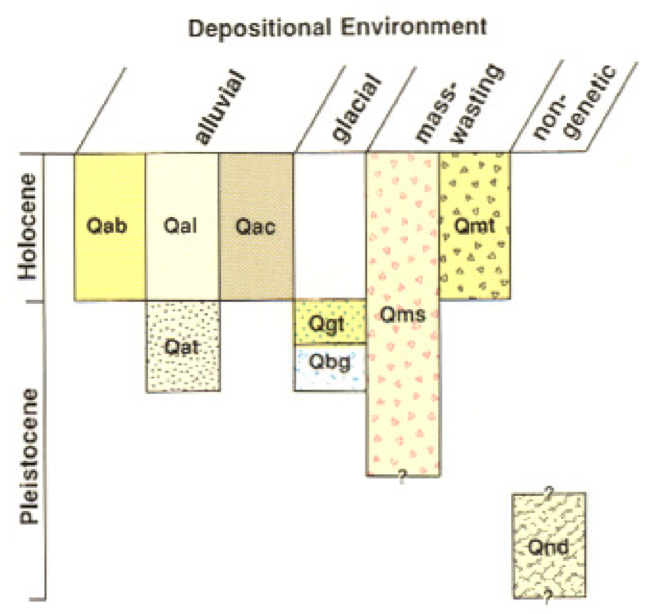
CONTOUR INTERVAL 50 METERS
SCALE 1:50,000

1 0 1 2 3 4 5
MILES

5,000 0 5,000 10,000 15,000 20,000 25,000 30,000
FEET

1 0 1 2 3 4 5
KILOMETERS

CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

- **Qal** — Alluvium (Holocene) - *Coarse to fine-grained alluvium along floodplains and channels of major streams. Maximum thickness probably less than 60 feet (20 m).*
- **Qac** — Alluvium and colluvium (Holocene) - *Coarse to fine-grained alluvium and colluvium of lower order streams and hillslopes. Maximum thickness probably less than 60 feet (20 m).*
- **Qab** — Bog deposits (Holocene) - *Fine-grained alluvium and peat in bogs filling shallow depressions at higher elevations in glaciated valleys. Maximum thickness probably less than 60 feet (20 m).*
- **Qmt** — Talus deposits (Holocene) - *Deposits of angular boulders on steep slopes below cliffs, especially in glaciated valleys; includes thickened talus in protalus ramparts and avalanch boulder tongues. Maximum thickness unknown.*
- **Qat** — Terrace alluvium (late Pleistocene) - *Coarse-grained outwash alluvium forming terraces along the Weber River Valley downstream from terminal moraines. Maximum thickness probably less than 160 feet (50 m).*
- **Qgt** — Glacial till (late Pleistocene) - *Poorly sorted bouldery till that forms lateral, terminal, and recessional moraines; most likely of Pinedale (late Wisconsin) age. Maximum thickness probably less than 240 feet (75 m).*
- **Qbg** — Glacial till (late Pleistocene) - *Thin, discontinuous glacial till overlying bedrock ; poorly sorted bouldery till; includes areas of erratics and striated bedrock. Maximum thickness unknown.*
- **Qms** — Landslide deposits (Holocene and Pleistocene) - *Deposits of large landslides, slumps, debris slides, and rock slides; many are post-glacial, but some large slides existed prior to glaciation. Maximum thickness unknown.*
- **Qnd** — Diamicton (Pleistocene ?) - *Deposits of rounded boulders in a fine-grained matrix; depositional environment unknown (probably glacial or fluvial). Maximum thickness probably less than 100 feet (30 m).*
- **b** — Precambrian, Paleozoic, Mesozoic, and Tertiary Rocks - *Bedrock (see Bryant, 1990).*

SYMBOLS

- Contact
- Landslide head scarp
- Direction of ice flow as indicated by crescentic fractures or lunate gouges in bedrock.
- Ridge crest of moraine (in glacial till) or protalus rampart (in talus)
- *Bear Trap north* — Informal names of glaciers dissussed in text